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## **CLAIMS**

- 1. An optical communication system comprising:
  - one or more optical radiation transmitters;
  - a means of coupling optical radiation from the, or each, optical radiation transmitter into a multimode fibre using a launch which restricts the number of modes excited in the fibre; and
  - a photodetector;

characterised by the feature that the, or each, optical radiation transmitter is a single transverse mode laser transmitter and that the transmission signals used are radio frequency signals.

- 2. An optical communication system according to Claim 1 where the means of coupling light into the fibre produces a launch which is co-linear but at an offset to the fibre axis.
- 3. An optical communication system according to claim 2 where the fibre has a core diameter of 62.5μm and where the offset distance measured from the centre of the multimode fibre core to the centre of the optical radiation emitted from the transmitter is from approximately 10 μm to approximately 30 μm.
- 4. An optical communication system according to Claim 3 where the offset distance measured from the centre of the multimode fibre core to the centre of the optical radiation emitted from the transmitter is from approximately  $23\,\mu m$  to approximately  $30\,\mu m$ .
- 5. An optical communication system as substantially described with reference to and as illustrated in any appropriate combination of the accompanying text and drawings.